

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: application of: He et al.

Serial No.: 08/462,969

Group Art Unit: 1652

Filed: June 5, 1995

Examiner: G. Bugaisky

For: Interleukin-1  $\beta$  Converting Enzyme  
Like Apoptosis Protease 3 and 4

Attorney Docket No.: PF140P1

Declaration of Craig Rosen Under 37 CFR §1.132

Assistant Commissioner For Patents  
Washington, D.C. 20231

Sir:

1. I, Craig Rosen, Ph.D., hereby declare and state as follows:

2. I am named as an inventor on the captioned U.S. Patent Application. I am employed by Human Genome Sciences, Inc. (HGS) as Senior Vice President, Research and Development. The work described below was done by myself, under my supervision, or as part of a collaborative research effort with other individuals at Human Genome Sciences, Inc. (HGS) and with individuals working at the University of Michigan.

3. We identified a cDNA clone encoding Interleukin-1 Beta Converting Enzyme Like Apoptosis Protease-3 (ICE-LAP3) by screening the proprietary HGS database of partial-length (EST) sequences for similarity to members of the ICE/Ced-3 polypeptide family. We retrieved the cDNA clone corresponding to the partial-length sequence from HGS' catalogued library of cDNA clones. The clone retrieved had the designation HE2CA82 and was deposited with the American Type Culture Collection as ATCC accession no. 75875 on August 25, 1994 (a copy of the ATCC contract for accession no. 75875 is attached as Exhibit A). We determined the complete nucleotide sequence for the HE2CA82 clone, using sequencing methods which were routine in the art and publicly available as of November 1, 1994; i.e., as of the filing date of parent application U.S. Serial No. 08/334,251, to which the captioned application claims priority.

4. The nucleotide sequence data filed in the captioned U.S. Patent Application and the nucleotide sequence data published in Duan et al., J. Biol. Chem. 271:1621 (1996) (Exhibit B), which differ slightly, were both obtained from cDNA clone HE2CA82. The "original" sequence data was disclosed in the captioned application and in parent application U.S. Serial No. 08/334,251. The "corrected" sequence data published in Duan et al. was also published in GenBank as accession no. U39613 (Exhibit C).

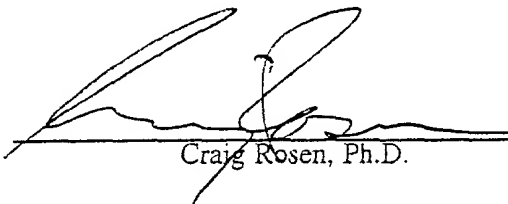
5. The differences in the original nucleotide sequence data and the corrected nucleotide sequence data are shown in the sequence alignment attached hereto as Exhibit D (the original sequence data is denoted "PF140" and the corrected sequence data is denoted "Duan"). As can be seen from Exhibit D, the original nucleotide sequence data differs from the corrected sequence data at four (4) nucleotide positions. The differences in the originally deduced amino acid sequence and the amino acid sequence deduced from the corrected nucleotide sequence data is shown in the alignment attached hereto as Exhibit E.

6. The accuracy of the original sequencing data represented by the sequences shown in Figure 1 of the present application is greater than 99%. I am of the opinion that 99% accuracy is well within the state of the art of DNA sequencing at the time parent application U.S. Serial No. 08/334,251 was filed (i.e., November 1, 1994). Further, I am of the opinion that the corrected ICE-LAP3 nucleotide and amino acid sequences would have been apparent to one skilled in the art in possession of the corresponding human cDNA clone contained in ATCC Deposit No. 75875 (referenced in the captioned patent application and in parent application U.S. Serial No. 08/334,251) and the sequence data presented in U.S. Serial No. 08/334,251. I believe this to be true because the correct ICE-LAP3 coding sequence can be readily determined from the deposited clone using methods of DNA sequencing which were routine in the art as of November 1, 1994.

7. I believe that the actual coding portion of the nucleotide sequence of the human cDNA clone contained in ATCC Deposit No. 75875 is the same as the nucleotide sequence published as GenBank Accession No. U39613 in connection with the Duan et al. publication.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereupon.

3/14/99  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Craig Rosen, Ph.D.

Station	Time	Wind	Temp	Humid	Barom	Clouds	Remarks
1	0000	000	50.0	85	30.00	0	
2	0100	000	50.0	85	30.00	0	
3	0200	000	50.0	85	30.00	0	
4	0300	000	50.0	85	30.00	0	
5	0400	000	50.0	85	30.00	0	
6	0500	000	50.0	85	30.00	0	
7	0600	000	50.0	85	30.00	0	
8	0700	000	50.0	85	30.00	0	
9	0800	000	50.0	85	30.00	0	
10	0900	000	50.0	85	30.00	0	
11	1000	000	50.0	85	30.00	0	
12	1100	000	50.0	85	30.00	0	
13	1200	000	50.0	85	30.00	0	
14	1300	000	50.0	85	30.00	0	
15	1400	000	50.0	85	30.00	0	
16	1500	000	50.0	85	30.00	0	
17	1600	000	50.0	85	30.00	0	
18	1700	000	50.0	85	30.00	0	
19	1800	000	50.0	85	30.00	0	
20	1900	000	50.0	85	30.00	0	
21	2000	000	50.0	85	30.00	0	
22	2100	000	50.0	85	30.00	0	
23	2200	000	50.0	85	30.00	0	
24	2300	000	50.0	85	30.00	0	

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INTERLEUKIN-1 BETA CONVERTING ENZYME LIKE APOPTOSIS PROTEASE-3 & 4

the specification of which [ ] is attached hereto or [x] was filed on November 1, 1994 as Application Serial No. 08/334,251 and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s):

			<u>P r i o r i t y</u>	
<u>Claimed</u>				
<u>None</u>	<u>                    </u>	<u>                    </u>	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)		
<u>                    </u>	<u>                    </u>	<u>                    </u>	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)		

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>None</u>		
<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status: patented, pending, abandoned)</u>
<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status: patented, pending, abandoned)</u>

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: John N. Bain (Reg. No. 18,651); John G. Gilfillan, III (Reg. No. 22,746); Elliot M. Olstein (Reg. No. 24,025); Raymond J. Lillie (Reg. No. 31,778); Charles J. Herron (Reg. No. 28,019); Gregory Ferraro (Reg. No. 36,134) and William Squire (Reg. No. 25,378). Address correspondence and telephone calls to Charles J. Herron c/o Carella, Byrne, Bain, Gilfillan, Cecchi, Stewart & Olstein, 6 Becker Farm Road, Roseland, NJ 07068 - (201) 994-1700.

[illegible]

Full name of additional joint inventor: Gregg A. Hastings  
 Inventor's signature: [Signature] Date: 2-6-95  
 Residence: 9913 Gable Ridge Terrace, Apt H, Rockville, MD 20850  
 Citizenship: USA Post Office Address:

VIA HAND DELIVERY JULY 2, 2001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: He et al.

Attorney Docket No.: PF140C2

Application Serial No.: Unassigned

Art Unit: Unassigned

Filed: Herewith

Examiner: Unassigned

Title: Interleukin-1 Beta Converting Enzyme  
Like Apoptosis Protease-3 and 4

**STATEMENT UNDER 37 C.F.R. § 3.73, REVOCATION OF PRIOR  
POWERS OF ATTORNEY OR AUTHORIZATIONS OF AGENT, AND  
POWER OF ATTORNEY OR AUTHORIZATION OF AGENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

**Statement Under 37 C.F.R. § 3.73**

Human Genome Sciences, Inc., organized and existing under the laws of the State of Delaware, having its principal place of business at 9410 Key West Avenue, Rockville, Maryland 20850, states that it is the assignee of record of the entire right, title and interest for the above-identified application by virtue of:

- ☐ A. An assignment from the inventor(s) of the above-identified application.
- ☐ 1. The assignment was recorded in the U.S. Patent and Trademark Office on \_\_\_\_\_, at Reel \_\_\_\_\_, Frame \_\_\_\_\_.
- ☐ 2. A copy of the assignment is attached.
- ☒ B. An assignment from the inventor(s) of the above-identified application of the parent application (U.S. Patent Application No. 08/334,251, filed November 1, 1994), filed in the U.S. Patent and Trademark Office on February 27, 1995, at Reel 7382, Frame 0751.

- ☐ C. A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the U.S. Patent and Trademark Office on \_\_\_\_\_, at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

2. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the U.S. Patent and Trademark Office on \_\_\_\_\_, at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

3. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the U.S. Patent and Trademark Office on \_\_\_\_\_, at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

The undersigned, whose title is supplied below, is empowered to sign this document on behalf of the assignee. The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

**Revocation of Prior Powers of Attorney or Authorizations of Agent**

The assignee, Human Genome Sciences, Inc., hereby revokes all previous powers of attorney or authorizations of agent given in the above-captioned application.

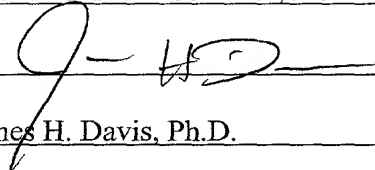
**Power of Attorney or Authorization of Agent**

The assignee, Human Genome Sciences, Inc., hereby appoints the Practitioners at **Customer Number 22195** as its attorneys or agents with full power of substitution, association, and revocation to prosecute the application identified above, including any continuation or divisional applications, and to transact all business in the U.S. Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to the above-mentioned Customer Number, namely **22195**.

On behalf of Human Genome Sciences, Inc.

For: Human Genome Sciences, Inc

Signature: 

Name: James H. Davis, Ph.D.

Title: Senior Vice President and General Counsel

Date: 7/2/01

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